Experimental Neurology

A JOURNAL OF NEUROSCIENCE RESEARCH

EDITOR-IN-CHIEF
John R. Sladek, Jr.
University of Health Sciences/
The Chicago Medical School

VOLUME 133, 1995

ACADEMIC PRESS, INC.
Harcourt Brace & Company
San Diego New York Boston London Sydney Tokyo Toronto

Copyright © 1995 by Academic Press, Inc.
All Rights Reserved

No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopy, recording, or any information storage and retrieval system, without permission in writing from the copyright owner.

The appearance of the code at the bottom of the first page of an article in this journal indicates the copyright owner's consent that copies of the article may be made for personal or internal use, or for the personal or internal use of specific clients. This consent is given on the condition, however, that the copier pay the stated per copy fee through the Copyright Clearance Center, Inc. (222 Rosewood Drive, Danvers, Massachusetts 01923), for copying beyond that permitted by Sections 107 or 108 of the U.S. Copyright Law. This consent does not extend to other kinds of copying, such as copying for general distribution, for advertising or promotional purposes, for creating new collective works, or for resale. Copy fees for pre-1995 articles are as shown on the article title page; if no fee code appears on the title page, the copy fee is the same as for current articles.

0014-4886/95 $6.00

MADE IN THE UNITED STATES OF AMERICA

This journal is printed on acid-free paper.

Contents of Volume 133

Number 1, May 1995

Perspective

JEFFREY M. ROSENSTEIN. Why Do Neural Transplants Survive? 1

Regular Articles

JAMES J. VORNOV, ROBERT C. TASKER, AND JOHN PARK. Neurotoxicity of Acute Glutamate Transport Blockade Depends on Coactivation of Both NMDA and AMPA/Kainate Receptors in Organotypic Hippocampal Cultures 7

JÜRGEN ENGELE AND MARIANNE LEHNER. Regulation of Glial-Derived Dopaminergic Growth Factors by Glucocorticoids and Protein Kinase C 18

NADIRA ISLAM, AKIYOSHI MORIWAKI, YUKIO HATTORI, YASUSHI HAYASHI, YUN-FEI LU, AND YASUO HORI. c-Fos Expression Mediated by *N*-Methyl-D-aspartate Receptors Following Anodal Polarization in the Rat Brain 25

GORDON R. CHALMERS, LISA J. FISHER, KENJI NIIJIMA, PAUL H. PATTERSON, AND FRED H. GAGE. Adrenal Chromaffin Cells Transdifferentiate in Response to Basic Fibroblast Growth Factor and Show Directed Outgrowth to a Nerve Growth Factor Source *in Vivo* 32

GEORGE KOVALEVSKY, DAVID DILORETO, JR., JEFFREY WYATT, CONSTANCIA DEL CERRO, CHRISTOPHER COX, AND MANUEL DEL CERRO. The Intensity of the Pupillary Light Reflex Does Not Correlate with the Number of Retinal Photoreceptor Cells 43

CHRISTIAN SPENGER, CAROLYN HYMAN, LORENZ STUDER, MARK EGLI, LJUDMILA EVTOUCHENKO, CARL JACKSON, ANNETTE DAHL-JØRGENSEN, RONALD M. LINDSAY, AND ROLF W. SEILER. Effects of BDNF on Dopaminergic, Serotonergic, and GABAergic Neurons in Cultures of Human Fetal Ventral Mesencephalon 50

GUIDO CAVALETTI, GIOVANNI TREDICI, MASSIMILIANO BRAGA, AND SARA TAZZARI. Experimental Peripheral Neuropathy Induced in Adult Rats by Repeated Intraperitoneal Administration of Taxol 64

A. DINOPOULOS AND I. DORI. The Development of the Serotonergic Fiber Network of the Lateral Ventricles of the Rat Brain: A Light and Electron Microscopic Immunocytochemical Analysis 73

TIA SEA, MARTIS L. BALLINGER, AND GEORGE D. BITTNER. Cooling of Peripheral Myelinated Axons Retards Wallerian Degeneration 85

MARTIN GRABOWSKI, JENS CHRISTIAN SØRENSEN, BENGT MATTSSON, JENS ZIMMER, AND BARBRO B. JOHANSSON. Influence of an Enriched Environment and Cortical Grafting on Functional Outcome in Brain Infarcts of Adult Rats 96

Announcement 103

Number 2, June 1995

RUSSELL E. KOHNKEN, URI S. LADROR, GARY T. WANG, THOMAS F. HOLZMAN, BARNEY E. MILLER, AND GRANT A. KRAFFT. Cathepsin D from Alzheimer's-Diseased and Normal Brains 105

JAGJIT S. GILL, KRISTEN L. HOBDAY, AND ANTHONY J. WINDEBANK. Mechanism of Suramin Toxicity in Stable Myelinating Dorsal Root Ganglion Cultures 113

DEBORAH YOUNG AND MICHAEL DRAGUNOW. Neuronal Injury Following Electrically Induced Status Epilepticus with and without Adenosine Receptor Antagonism 125

3 161HI XL 1339
2/96 31249-150

KATHLEEN A. KUJAWA, LISA TANZER, AND KATHRYN J. JONES. Inhibition of the Accelerative Effects of Testosterone on Hamster Facial Nerve Regeneration by the Antiandrogen Flutamide 138

H. C. JONES, N. G. HARRIS, R. W. BRIGGS, AND S. C. R. WILLIAMS. Shunt Treatment at Two Postnatal Ages in Hydrocephalic H-Tx Rats Quantified Using MR Imaging 144

KATSUTOSHI FURUKAWA, VIRGINIA L. SMITH-SWINTOSKY, AND MARK P. MATTSON. Evidence That Actin Depolymerization Protects Hippocampal Neurons against Excitotoxicity by Stabilizing $[Ca^{2+}]_i$ 153

FERNANDO GÓMEZ-PINILLA, EEKE A. VAN DER WAL, AND CARL W. COTMAN. Possible Coordinated Gene Expressions for FGF Receptor, FGF-5, and FGF-2 Following Seizures 164

JILL M. DELFS, GAYLORD D. ELLISON, MARIANNE MERCUGLIANO, AND MARIE-FRANÇOISE CHESSELET. Expression of Glutamic Acid Decarboxylase mRNA in Striatum and Pallidum in an Animal Model of Tardive Dyskinesia 175

ANDREW A. ZALEWSKI, NABIL A. AZZAM, AND RITA N. AZZAM. The Loss of Regenerated Host Axons in Nerve Allografts after Stopping Immunosuppression with Cyclosporin A Is Related to Immune Effects on Allogeneic Schwann Cells 189

HARI MANEV, CINZIA M. CAGNOLI, CAGLA ATABAY, ELENA KHARLAMOV, MILOŠ D. IKONOMOVIĆ, AND DENNIS R. GRAYSON. Neuronal Apoptosis in an *in Vitro* Model of Photochemically Induced Oxidative Stress 198

LEON S. DURE IV, SARA WIESS, DAVID G. STANDAERT, GREGORY RUDOLF, CLAUDIA M. TESTA, AND ANNE B. YOUNG. DNA Fragmentation and Immediate Early Gene Expression in Rat Striatum Following Quinolinic Acid Administration 207

MERAB KOKAIA, PATRIK ERNFORS, ZAAL KOKAIA, ESKIL ELMÉR, RUDOLF JAENISCH, AND OLLE LINDVALL. Suppressed Epileptogenesis in BDNF Mutant Mice 215

GEORGEANN SMALE, NANCY R. NICHOLS, DANIEL R. BRADY, CALEB E. FINCH, AND WALTER E. HORTON JR.. Evidence for Apoptotic Cell Death in Alzheimer's Disease 225

PHILIP J. HORNER AND BRADFORD T. STOKES. Fetal Transplantation Following Spinal Contusion Injury Results in Chronic Alterations in CNS Glucose Metabolism 231

ROBERT B. ARAMANT AND MAGDALENE J. SEILER. Fiber and Synaptic Connections between Embryonic Retinal Transplants and Host Retina 244

ROCHELLE WAGNER, JOYCE A. DELEO, HEIDI M. HECKMAN, AND ROBERT R. MYERS. Peripheral Nerve Pathology Following Sciatic Cryoneurolysis: Relationship to Neuropathic Behaviors in the Rat 256

Brief Communication

L. BRANNON THOMAS, DONNA J. GATES, ERIC K. RICHFIELD, THOMAS F. O'BRIEN, JOHN B. SCHWEITZER, AND DENNIS A. STEINDLER. DNA End Labeling (TUNEL) in Huntington's Disease and Other Neuropathological Conditions 265

Author Index for Volume 133 273

NOTICE

The Subject Index for Volume 133 will appear in the December 1995 issue as part of a cumulative index for the year 1995.